3-Month Electronics Course

For Indian Students (Class 6 to 9)

1 Class per Week - 2 Hours Each

Month 1: Foundation of Electricity and Basic Components

- Week 1: What is electricity? Basic safety rules. Real-world examples.
- Week 2: Conductors, insulators, open and closed circuits (with activities).
- Week 3: Series and parallel circuits - simple demo circuits on breadboard.
- Week 4: Switches, LEDs, batteries - Building a simple light circuit.

Month 2: Intermediate Concepts and Hands-on Practice

- Week 5: Using a breadboard - inserting and connecting components.
- Week 6: Resistors - color coding, using them in circuits, calculating values.
- Week 7: Capacitors (basic understanding), building LED blink circuits.
- Week 8: Multimeter use (basic) - voltage and continuity tests.

Month 3: Practical Applications and Final Project

- Week 9: LDRs and basic sensor concepts - Night light project.
- Week 10: Making a touch switch using foil/paper and resistor.
- Week 11: Recap of all components - design your own mini project.
- Week 12: Present final projects, feedback, and group discussion.